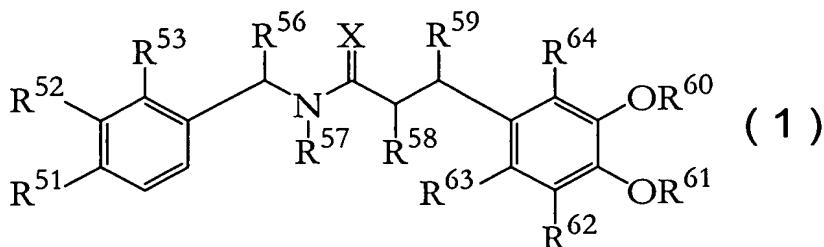


CLAIMS

1. An amide compound represented by the formula (1):



5 wherein, in the formula,

R^{51} represents a halogen atom, a C1-C6 alkyl group, a C3-C6 cycloalkyl group, a C1-C6 haloalkyl group, a C2-C6 alkenyl group, a C2-C6 haloalkenyl group, a C2-C6 alkynyl group, a C2-C6 haloalkynyl group, a C1-C6 alkoxy group, a C3-C6 alkenyloxy group,

10 a C3-C6 alkynyloxy group, a C1-C6 haloalkoxy group, a (C1-C6 alkoxy)C1-C6 alkyl group, a phenoxy C1-C6 alkyl group, a C1-C6 hydroxyalkyl group, a (C1-C6 alkyl) sulfonyloxy C1-C6 alkyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylamino group, a di(C1-C6alkyl)amino group, a formyl group,

15 a (C1-C6 alkyl) carbonyl group, a (C1-C6 alkoxy) carbonyl group, a (C1-C6 alkoxy) imino C1-C6 alkyl group, benzyloxyimino C1-C6 alkyl group, a di(C1-C6 alkylamino) imino C1-C6 alkyl group, a tri(C1-C6 alkyl) silyl group, a phenyl group, a phenoxy group, a cyano group or a nitro group; R^{52} represents a hydrogen atom,

20 a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C2-C6 alkenyl group, a C2-C6 alkynyl group, a cyano group or a nitro group; or both of R^{51} and R^{52} are combined together to represent a C3-C6 alkylene group or a group of $-CR^{65}=CR^{66}-CR^{67}=CR^{68}-$ (R^{65} , R^{66} , R^{67} and R^{68} independently represent a hydrogen atom,

a halogen atom, a C1-C3 alkyl group, a C1-C3 alkoxy group or a C1-C3 haloalkyl group);

R⁵³ represents a hydrogen atom, a halogen atom, a C1-C3 alkyl group or a C1-C3 haloalkyl group;

5 R⁵⁶ represents a hydrogen atom, a C1-C4 alkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group;

R⁵⁷ represents a hydrogen atom, a C1-C4 alkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group;

10 R⁵⁸ and R⁵⁹ independently represent a hydrogen atom, a halogen atom or a C1-C3 alkyl group;

R⁶⁰ represents a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C3-C4 alkenyl group or a C3-C6 alkynyl group;

15 R⁶¹ represents a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C3-C4 alkenyl group or a C3-C6 alkynyl group or a C2-C4 cyanoalkyl group;

each of R⁶², R⁶³ and R⁶⁴ represents a hydrogen atom, a halogen atom or a C1-C2 alkyl group;

X represents an oxygen atom or a sulfur atom.

2. The amide compound according to claim 1, wherein R⁵¹ is a halogen atom, a C1-C6 alkyl group, a C3-C6 cycloalkyl group, a C1-C6 haloalkyl group, a C2-C6 alkenyl group, a C2-C6 haloalkenyl group, a C2-C6 alkynyl group, a C2-C6 haloalkynyl group, a C1-C6 alkoxy group, a C3-C6 alkenyloxy group, a C3-C6 alkynyloxy group, a C1-C6 haloalkoxy group, a (C1-C6alkoxy) C1-C6 alkyl group, a phenoxy C1-C6 alkyl group, a C1-C6 hydroxyalkyl group, a (C1-C6 alkyl) sulfonyloxy C1-C6 alkyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylamino group, a di(C1-C6 alkyl) amino group, a formyl group, a (C1-C6 alkyl) carbonyl

group, a (C1-C6 alkoxy) carbonyl group, a (C1-C6 alkoxy) imino C1-C6 alkyl group, a benzyloxyimino C1-C6 alkyl group, a di(C1-C6 alkylamino) imino C1-C6 alkyl group, tri(C1-C6 alkyl) silyl group, a phenyl group, a phenoxy group, a cyano group or a nitro group;
5 R⁵² is a hydrogen atom, a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C2-C6 alkenyl group, a C2-C6 alkynyl group, a cyano group or a nitro group.

3. The amide compound according to claim 1, wherein the group which R⁵¹ and R⁵² are combined together is a group of
10 -CR⁶⁵=CR⁶⁶-CR⁶⁷=CR⁶⁸- (R⁶⁵, R⁶⁶, R⁶⁷ and R⁶⁸ is independently a hydrogen atom, a halogen atom, a C1-C3 alkyl group, a C1-C3 alkoxy group or a C1-C3 haloalkyl group).

4. The amide compound according to any one of claim 1 to 3, wherein R⁵³ is a hydrogen atom.

15 5. The amide compound according to any one of claim 1 to 4, wherein R⁶², R⁶³ and R⁶⁴ are hydrogen atoms.

6. The amide compound according to any one of claim 1 to 5, wherein R⁵⁸ and R⁵⁹ is independently a hydrogen atom, a fluorine atom or a methyl group.

20 7. The amide compound according to any one of claim 1 to 5, wherein R⁵⁸ and R⁵⁹ are hydrogen atoms.

8. The amide compound according to any one of claim 1 to 7, wherein R⁵⁶ is a hydrogen atom.

25 9. The amide compound according to claim 1, wherein R⁵¹ is a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C2-C4 alkenyl group, a C2-C4 alkynyl group, a C1-C4 alkoxy group, a C1-C4 haloalkoxy group, a C1-C4 alkylamino group, a di(C1-C4alkyl) amino group or a cyano group; R⁵² is a hydrogen

atom, a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group; or both of R⁵¹ and R⁵² are combined together to be a C3-C5 alkylene group or a group of -CH=CH-CH=CH-;

5 R⁵⁷ is a hydrogen atom or a C1-C3 alkyl group;
R⁶⁰ is a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C3-C4 alkenyl group or a C3-C4 alkynyl group;
R⁶¹ is a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C3-C4 alkenyl group or a C3-C4 alkynyl group.

10 10. The amide compound according to claim 9, wherein R⁵¹ is a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C2-C4 alkenyl group, a C2-C4 alkynyl group, a C1-C4 alkoxy group, a C1-C4 haloalkoxy group, a C1-C4 alkylamino group, a di(C1-C4 alkyl) amino group or a cyano group; R⁵² is a hydrogen atom, a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group.

15 11. The amide compound according to claim 9, wherein the group which R⁵¹ and R⁵² are combined together is a C3-C5 alkylene group or a group of -CH=CH-CH=CH-.

20 12. The amide compound according to any one of claim 9 to 11, wherein R⁵³ is a hydrogen atom.

13. The amide compound according to any one of claim 9 to 12, wherein R⁶², R⁶³ and R⁶⁴ are hydrogen atoms.

25 14. The amide compound according to any one of claim 9 to 13, wherein R⁵⁸ and R⁵⁹ are hydrogen atoms.

15. The amide compound according to any one of claim 9 to 14, wherein R⁵⁶ is a hydrogen atom.

16. The amide compound according to any one of claim 1 to 15,

wherein R⁵⁷ is a hydrogen atom.

17. The amide compound according to any one of claim 1 to 16, wherein X is an oxygen atom.

18. The amide compound according to any one of claim 1 to 16, 5 wherein X is a sulfur atom.

19. The amide compound according to any one of claim 1 to 18, wherein R⁵¹ is a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C2-C4 alkenyl group, a C2-C4 alkynyl group, a C1-C4 alkoxy group, a C1-C4 haloalkoxy group or a cyano group; R⁵² is a hydrogen atom, a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group; or both of R⁵¹ and R⁵² are combined together to be a C3-C5 alkylene group or a group of -CH=CH-CH=CH-.

20. The amide compound according to any one of claim 1 to 18, 15 wherein R⁵² is a hydrogen atom, a halogen atom, a C1-C4 alkyl group or a C1-C4 haloalkyl group.

21. The amide compound according to any one of claim 1 to 20, wherein R⁵¹ is a halogen atom, a C1-C4 alkyl group or a C1-C4 haloalkyl group.

20 22. The amide compound according to any one of claim 1 to 20, wherein R⁵² is a hydrogen atom.

23. The amide compound according to any one of claim 1 to 18, wherein both of R⁵¹ and R⁵² may be combined together to be a C3-C6 alkylene group or a group of -CH=CH-CH=CH-.

25 24. The amide compound according to any one of claim 1 to 23, wherein R⁶⁰ is a C1-C4 alkyl group.

25. The amide compound according to any one of claim 1 to 23, wherein R⁶⁰ is a C1-C2 alkyl group.

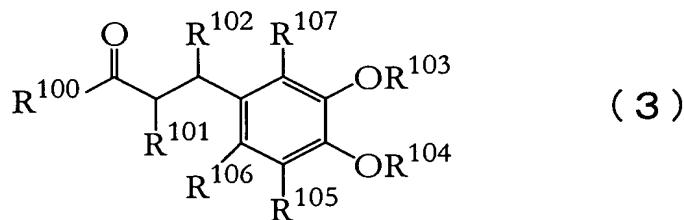
26. The amide compound according to any one of claim 1 to 25, wherein R⁶¹ is a C3-C4 alkynyl group.

27. A plant diseases controlling composition comprising the amide compound according to any one of claim 1 to 26 as an active 5 ingredient.

28. A method for controlling plant diseases comprising a step applying an effective amount of the amide compound according to any one of claim 1 to 26 to plants or soils growing the plant.

29. A use of the amide compound according to any one of claim 10 1 to 26 as an active ingredient of a plant disease controlling composition.

30. A compound represented by the formula (3):



wherein, in the formula,

15 R¹⁰⁰ represents a methoxy group, an ethoxy group, a propoxy group, an isopropoxy group, a butyloxy group, an isopropoxyloxy group, a tert-butyloxy group, an OH group or a chlorine atom; R¹⁰¹ and R¹⁰² independently represent a hydrogen atom, a halogen atom or a C1-C3 alkyl group; R¹⁰³ represents a C1-C4 alkyl group; R¹⁰⁴ represents a C3-C6 alkynyl group; R¹⁰⁵, R¹⁰⁶ and R¹⁰⁷ independently represent a hydrogen atom, a halogen atom or a C1-C2 alkyl group.

20 31. The compound according to claim 30, wherein each of R¹⁰¹ and R¹⁰² is a hydrogen atom, a fluorine atom or a methyl group; R¹⁰⁵, R¹⁰⁶ and R¹⁰⁷ are hydrogen atoms.

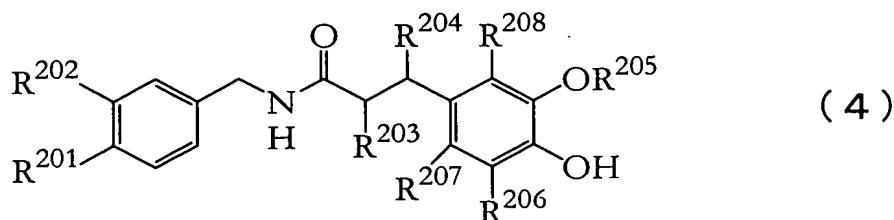
25 32. The compound according to claim 30, wherein R¹⁰¹, R¹⁰², R¹⁰⁵,

R^{106} and R^{107} are hydrogen atoms.

33. The compound according to any one of claim 30 to 32, wherein R^{103} is a methyl group or an ethyl group.

34. The compound according to any one of claim 30 to 33, wherein 5 R^{104} is a 2-propynyl group.

35. An amide compound represented by the formula (4):



wherein, in the formula,

R^{201} represents a halogen atom, a C1-C4 alkyl group, a C1-C4 10 haloalkyl group, a C1-C4 alkoxy group, a C1-C4 haloalkoxy group, a di(C1-C4alkyl)amino group or a cyano group; R^{202} represents a hydrogen atom, a halogen atom, a C1-C4 alkyl group or a C1-C4 haloalkyl group; or both of R^{201} and R^{202} are combined together 15 to represent a C3-C5 alkylene group or a group or $-\text{CH}=\text{CH}-\text{CH}=\text{CH}-$; R^{203} and R^{204} independently represent a hydrogen atom, a halogen atom or a C1-C3 alkyl group; R^{205} represents a C1-C4 alkyl group, R^{206} , R^{207} and R^{208} independently represent a hydrogen atom, a halogen atom or a C1-C2 alkyl group.

36. The amide compound according to claim 35, wherein each of 20 R^{203} and R^{204} is a hydrogen atom, a fluorine atom or a methyl group; R^{206} , R^{207} and R^{208} are hydrogen atoms.

37. The amide compound according to claim 35, wherein R^{203} , R^{204} , R^{206} , R^{207} and R^{208} are hydrogen atoms.

38. The compound according to any one of claim 35 to 37, wherein 25 R^{205} is a methyl group or an ethyl group.